

# Rim Fire Restoration Stanislaus National Forest

# News *flash*

April, 2015

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## Partnerships form the cornerstone of our success...

Although the Stanislaus National Forest was left with a burn scar that's one-third larger than New York City, it is rising phoenix-like from the ashes left in the wake of the Rim Fire. On March 26th and 27th, local school children gathered in the Groveland Ranger District during an Earth Day Event to plant the first 600 trees of the future forest.

"Planting trees on administrative sites, such as campgrounds and day-use areas, is just one part of the healing process," said Rebecca Garcia, Public Affairs Officer for the Stanislaus. "Involving the community in the long-term vision for future forest health is our ultimate goal."

Numerous U.S. Forest Service employees turned out to help ensure the sapling trees were planted with care. In 2016, the Stanislaus National Forest would like to engage the public in planting 180,000 additional conifers.

"Fifty-five percent of the Groveland Ranger District was burned by the Rim Fire," said Jim Junette, District Ranger, "so initiating the recovery of the forest in conjunction with our public is very exciting for us. Trees make our lives better! Forests create natural, healthy habitats for insects, squirrels, birds, plants and people. **It is imperative to restore our forests by planting trees in strategically chosen and ecologically sound locations.**"

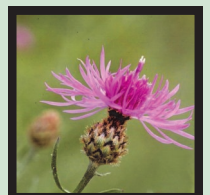
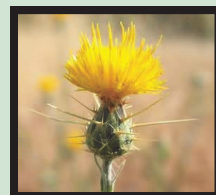
Reforestation a portion of the area burned by the fire is just one of many important projects outlined for the Stanislaus. Improving wildlife habitat, removing noxious weeds and further improving the hydrologic function of the forest are other recovery activities slated for the future.

The ability to carry out these ecologically based projects is going to require partnerships. Roughly \$120 million worth of unmet project needs have been identified thus far.

"That's why the Forest has been proactively pursuing opportunities such as the HUD grant," said Drake. "This multi-million dollar grant is aimed at natural disaster recovery and community resilience, something Tuolumne County could use."



AmeriCorps will be hosting seven young adults on the Stanislaus this summer. During the two month volunteer stay, they will be restoring trails, conducting outreach and pulling noxious weeds like this Yellow Star Thistle and Spotted Knapweed, pictured below.



# Insect infestations and forest health

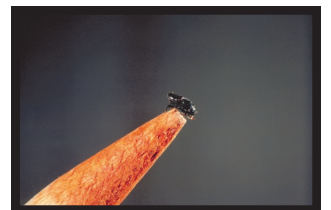
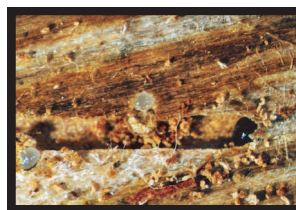
**Bark Beetles** are taking advantage of trees weakened by **drought** on the Stanislaus, as revealed by an aerial survey conducted in August of 2014. Dry spring conditions leading up to the survey left all 18 of the National Forests in California withering in drought. As a tree is weakened by dry conditions, a few beetles may move into the area hoping to lay eggs beneath the tree's bark. If there are only a few attackers, healthy trees can exude enough resinous pitch to keep the bugs from getting at the trees' vital parts such as their food and water tubes. That defensive pitch hardens creating tubes, alerting entomologists to the presence of an invading insect. Frass, which is sawdust minus the pitch, can indicate that the tree is so weak and devoid of moisture that it no longer has the vitality to protect itself as the bug bores its way into living tissue. These tiny sawdust piles can be seen on the bark where an insect has successfully drilled into the trunk of the tree.

"If water remains scarce, more trees will weaken," said Beverly Bulaon, an entomologist who works with the U.S. Forest Service. Invading Bark Beetles then release chemicals called aggregating pheromones which attract other beetles to the site. That's when the mass attack begins. The scope of the infestation, as spotted by the 2014 survey, was spread over 109,282 acres of the Stanislaus National Forest. Although that is a large area, mortality within that zone was light to moderate. "If the drought continues, mortality levels could climb," declared Beverly.

Many types of beetles can affect tree health, but Western Pine Beetles are one of the more common culprits. They have a preference for dense stands of Ponderosa Pine heavily impacted by drought. Mountain Pine Beetles, on the other hand, prey upon weakened Sugar Pines. If tree diseases like White Pine Blister Rust or other complicating stressors like drought and stand density weaken Sugar Pines, millions of trees can die.

"Western and Mountain Pine Beetles do not appear to be targeting dead trees in the Rim Fire," said Martin MacKenzie, a pathologist who works with the Forest Service. "With so many live and drought stressed trees available, there are better pickings, offering up a richer food source."

To learn more about forest health, visit: [http://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5384837.pdf](http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5384837.pdf) and <http://calfire.ca.gov/foreststeward/treenotes.html>

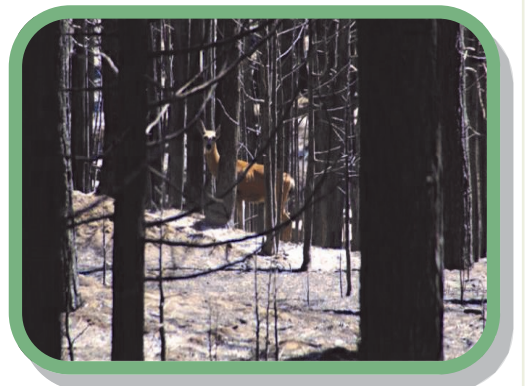


## Migratory deer herds in decline statewide

Numerous factors are impacting local deer herds according to the California Department of Fish and Wildlife, including:

- **Range decadence**
- **Grazing pressure from cattle**
- **Loss of habitat**
- **Poaching**
- **Predation**
- **Lice infestation which contribute to other stressors**

Winter range in the Lava Cap area was also impacted by the Rim Fire. Due to all of these factors, habitat for deer is specifically addressed on 3,837 acres in the proposed reforestation plan for the Stanislaus National Forest.



## Saving mountain lady slipper orchids



Photo courtesy: 2009 Keir Morse. License CC BY-NC-SA 3.0.

Learn more about the natural history of Lady Slipper Orchids on this USDA website:

<http://www.fs.fed.us/wildflowers/beauty/cypripedium/>

Saving these delicate orchids is just one example of the U.S. Forest Service serving as a steward of the land on the Stanislaus National Forest. Approximately half of the occurrences of this orchid were killed by the Rim Fire. Botanists would like to protect the remaining populations of this U.S. Forest Service sensitive plant by placing temporary fencing around the flowers to protect them from grazing cattle.

All of the known occurrences of this plant, save one small exception, were within the footprint of the fire. The bulbs and roots of the lilies were damaged when the fire burned through layers of duff on the forest floor.

Mountain Lady Slipper Orchids live in close association with Douglas Fir and the mycorrhizae associated with the tree's roots. In some cases, the mature fir trees that shaded the orchids were killed by the flames. Replanting Douglas Fir, or thinning out competing trees, is proposed on 13 acres where these orchids are known to exist.

## Salvage logging update



Salvage logging continues on the Forest, with new sales being put up for bid in fiscal year 2015. To date, 210,321 Million Board Feet of fire-killed trees have been removed from the forest via awarded logging contracts.

Removing these damaged trees accomplishes a number of important goals by:

- ♦ Mitigating safety concerns for the public & workers
- ♦ Removing tons of extra fuel from the forest floor
- ♦ Reducing the risk of future catastrophic wildfires
- ♦ Creating space for new seedling trees
- ♦ Allowing the wood to be crafted into useful objects that enhance our lives

## Archaeology: lessons from the past



Two thousand previously known archaeological sites existed within the perimeter of the Rim Fire. Field surveys conducted immediately following the Rim Fire revealed 221 additional sites.

Nearly all of the sites previously known were larger in size than once thought.

Prehistoric artifacts that had never been seen before were spotted by trained crews. The diversity of artifacts found at historic railroad logging camps was also impressive.

Protecting the sites is a priority for Forest Archaeologists. To date, \$1,083,831 dollars have been spent along those lines.





## Eagle scout makes rank on a Rim Fire Recovery project



Neil Armstrong, John Tesh, Steven Spielberg and James Mele were all Eagle Scouts. Thanks to this young man's perseverance and the help of the Stanislaus National Forest, so is Sean Griffith.

To move forward in his progression to Eagle Scout, Sean planned, directed and led 21 scouts, adults, family members and friends in a project to protect an archeological site on the Stanislaus National Forest.

The district's Off Highway Vehicle (OHV) area has a section which passes by an archeological site. The Rim Fire burned much of the area, and Sean's project was to build barriers on both sides of the OHV trail to delineate the trail and protect the site.

**What do the first man on the moon, a TV host, a movie director and a Tuolumne County Sheriff have in common with a high school senior from Twain Harte, California? They are all Eagle Scouts!**



## Community counts when it comes to our future forest

Three public meetings will soon be conducted on the Forest to encourage local residents to share their thoughts and concerns regarding reforestation. Engaging the public early on is an important part of the process. "This helps us to identify issues that need to be addressed," said Jeanne Higgins, Forest Supervisor. Ideas brought up during these public meetings can be instrumental in drafting alternative actions for the reforestation project. "This is a great opportunity to have your voice heard," said Higgins. **Everyone is welcome but we would like to receive a RSVP for each event you plan to attend. Please send RSVP to [gdempsey@fs.fed.us](mailto:gdempsey@fs.fed.us).**

**April 8**  
**Technical Reforestation**  
**Workshop & Work Meeting**  
**1:30 to 5:00**  
**Tuolumne County Emergency**  
**Operations Center at 18440**  
**Striker Court in Sonora, CA**

**April 8**  
**Reforestation Open House**  
**5:30 to 7:30 p.m.**  
**Tuolumne County Emergency**  
**Operations Center at 18440**  
**Striker Court in Sonora, CA**  
**Informal Information**  
**Sharing Event.**

**April 10**  
**Open House on Reforestation**  
**3:00 to 6:00**  
**Tuolumne County Emergency**  
**Operations Center at 18440**  
**Striker Court in**  
**Sonora, CA**  
**Informal Information**  
**Sharing Event**

